Math 120 (Hybrid) Intermediate Algebra

A hundred years from now it will not matter what my bank account was, the sort of house that I lived in, or the kind of a car I drove... but the world may be different place because I was important in the life of a student - Anon.



Instructor: Abe Mirza Email: <u>mirzaam@arc.losrios.edu</u> Office Hours: Wed: 7:20 - 8:20 room 114 Davis H

Class Website: https://ic.arc.losrios.edu/~mirzaam/math120/

Class attendance once a week is mandatory.

Course Prerequisite: Mathematics 100 with a grade of "C" or better or placement through assessment process. You **must** provide your prerequisite **by the end of the first week.**

Learning Outcomes and Objectives

Upon completion of this course, the student will be able to:

- graph and solve linear inequalities.
- graph systems of linear inequalities.
- solve equations and inequalities containing absolute values.
- solve and graph linear equations and systems of linear equations.
- create linear equations that pass through a given point and are parallel to a given line.
- create linear equations that pass through a given point and are perpendicular to a given line.
- simplify polynomial expressions.
- choose and apply appropriate techniques to factor a variety of polynomials.
- state whether a mathematical relation is a function and find its domain and range.
- construct the inverse of a given function.
- sketch graphs of basic exponential functions.
- utilize the properties of exponents to simplify exponential expressions and to solve exponential equations.
- sketch graphs of basic logarithmic functions.
- utilize the properties of logarithms to simplify logarithmic expressions and to solve logarithmic equations.
- simplify expressions containing radicals, using complex numbers where appropriate.
- solve quadratic equations for real and complex solutions.
- solve equations containing radicals.

- simplify rational expressions and solve rational equations for real and complex solutions.
- sketch graphs of basic conic sections.
- solve and graph systems of non-linear equations.
- develop an appropriate equation or system of equations and use the resulting equation(s) to solve application problems.

Text Book (Required): Intermediate Algebra, by Lial/Hornsby $(11^{th} \text{ edition})$. A scientific calculator may be used in class and on some quizzes and tests. Use of a graphing calculator is NOT allowed on quizzes or tests. A straight edge and graph paper is required. Math should never be done in ink; use pencil for homework and all assessments.

Required Material: Please bring your textbook to class each meeting. A scientific calculator and be sure you have its manual and know how to use it. Regular Graph Paper.

Attendance Requirements: I expect each student to be fully prepared to participate in each class session. It has been shown to benefit you. This is a college. You are here voluntarily. If you mist miss a class session it is your responsibility to ask a fellow classmate to bring you up to date with the material presented in class.



It is your responsibility to follow the proper procedures, in a timely manner, if you decide to withdraw.

Acquaint yourself with the dates for withdrawing and any associated financial requirements as detailed in the school catalog. The instructor may drop students for not attendenting class. Such drop is purely within the discretion of the instructor, if you decide not to continue at any time, you must officially withdraw, do not count on, nor ask the instructor, to drop you. At the end of the semester, the instructor MUST issue a grade to all students listed on the final roster. An "**excuse**" is an official document from either your physician or the school Health Center attesting to your inability to attend class on the meeting date(s) in question.

Homework: Homework are posted on class website. They are chapter homework and each one weighs 50 points. Doing and understanding the HW problems will be very beneficial in doing well on the tests. The due dates for each HW will be posted on the web. NO LATE HW WILL BE ACCEPPTED.

Quizzes: Occasional quizzes will be given throughout the term. Each quiz will be worth 10 points. Quizzes are open notes and open book. Some of these may be done in small groups. Quizzes will be base on the homework and <u>may be</u> <u>not be made-up</u>.

Tests: There will be a total of 8 tests and a final examination. Each test is worth 100 points. <u>There will not be a</u> <u>make-up for any test</u>, so if by any unexcused reason you miss one test, you will be receiving a score of zero for it.

The <u>tentative</u> grade distribution. The actual numbers of test may vary.

Y our grade will be determine	d as follows:
Quizzes	= 120
Homework (10x20)	= 180 points The lowest HW score will be dropped
Tests (8x100)	= 800 points
Final Exam	= 200 points
Total Points	= 1300 points

Grading Policy:

At the end of the semester, points from quizzes, tests, and the final will be totaled and grading will be based on the percentage of points you have accumulated as follows:

A 90% - 100% ----> of possible points B -----> 80% - 89% of possible points -----> 70% - 79% C of possible points ----> 60% - 69% of possible points D F 0% - 59% of possible points



SUGGESTUI FOR YOUR SUCCESS IN THE CLASS:

Read ahead in the text on the topics to be covered in the class. Do the assignments as soon as possible after each class. It will help you do more than just the assigned problems. If you need help on a problem, ask for it! Ask me or any one else in the class. It can be very helpful to work in groups, discussing the "HOW'S" and WHY'S" of the problems. However, be very careful; do not let the group work the problem for you. **Don't get behind**. Enjoy the work and have fun!

Proposed Schedule: Subject to change on class progress or unforeseen events. If class is missed for any reason it is the student's responsibility to discuss with a fellow classmate work that was missed.

Rude and disturbing behavior: Proper, polite (considerate) behavior at all times is expected. The key is consideration for others. The following is a partial list of all actions, some of which are school policy and other of which are instructor's policies, which are a disturbance in the classroom and are strongly discouraged while in the class is in session:

- Any electronic communication devices, pagers, cell phone, etc., which ring during class time must be turned off for the entire class period.
- Leaving the classroom during lecture or discussion for any reason. A beak is scheduled for all classes meeting for more than 11/2 hours at a time.
- > Carrying on private conversations with classmates.

Do not:

- Arrive late and/or leave early. These are good ways to short yourself on the experience of learning the subject and pose the possibility that you will miss test related information.
- ➢ Ask permission to leave class early..
- > Bring family or friends to class, only properly enrolled students may attend class.

Have A Great Semester!!!